

AEROMEDICAL CONCERNS: Human Immunodeficiency Virus (HIV) is a chronic infection with variable course, ultimately causing a decline in immune functioning resulting in opportunistic infections, malignancies and neurologic problems. Treatment of HIV requires at least three antiretroviral medications with multiple side effects, toxicities and drug interactions which are not compatible with flight duties. Persons with HIV are monitored in CONUS and nondeployable, thereby precluding operational assignments.

WAIVERS:

Initial Applicants (all classes): HIV is disqualifying from aviation service and exceptions to policy or waivers for initial applicants are not granted.

Rated Aviation Personnel (all classes): Waivers will be considered on a case-by-case basis. Waivers may be granted for full or restricted duties if completely asymptomatic with quarterly monitoring unless otherwise determined per ID specialist.

INFORMATION REQUIRED: AR 600-110, Identification Surveillance and Administration of Personnel with Human Immunodeficiency Virus (HIV), guides management of HIV positive individuals.

- ❑ AMS to include presentation, as well as complete, current clinical staging (CD4 cell count and plasma HIV RNA level (viral load) – include testing methods.
- ❑ Consult from Infectious Disease with assessment, prognosis and plan for care (to include medication regimen if required)
- ❑ Consult from Psychiatry to include clinical evaluation and baseline neuropsychiatric/cognitive testing
- ❑ Command support

FOLLOW UP: Per Infectious Disease specialist, periodic (e.g. quarterly) labs will be evaluated. A change in clinical status (CD4 count <350 or viral load > 55,000) requiring initiation of antiretroviral therapy or from asymptomatic to symptomatic will require immediate re-assessment of waiver. Annual evaluation at a MEDCEN or its equivalent is required.

TREATMENT: Treatment is disqualifying. Antiretroviral regimens are complex, have serious side effects, pose difficulty with adherence, and carry serious potential consequences from the development of viral resistance because of nonadherence to the drug regimen or suboptimal levels of antiretroviral agents. Highly active antiretroviral therapy (HAART) with a three-drug regimen has dramatically improved survival rates.

Treatment should be offered to all patients with symptoms ascribed to HIV infection. Recommendations for offering antiretroviral therapy among asymptomatic patients require analysis of real and potential risks and benefits. Treatment should be offered to persons who have < 350 CD4+ T cells/mm³ or plasma HIV ribonucleic acid (RNA) levels of > 55,000 copies/mL (by b-deoxyribonucleic acid [bDNA] or reverse transcriptase-polymerase chain reaction [RT-PCR] assays).

DISCUSSION: The mean incubation time between infection with HIV to development of AIDS is ten years. Highly active antiretroviral therapy (HAART) has significantly contributed to this success. The side effects of these medications make them incompatible with flight duties. HIV infects cells with CD4 receptors causing a cell death and decline in immune function. The resultant opportunistic conditions or CD4 count <200 cells/mm³ defines the change from HIV to Acquired Immune Deficiency Syndrome (AIDS). The primary aeromedical concern of HIV is its neurologic manifestations. Neurologic features of primary HIV-1 are uncommon but include meningoencephalitis, peripheral neuropathy, Guillain-Barré syndrome, brachial neuritis, radiculopathy, cognitive impairment, or psychosis. Neurologic dysfunction may be seen even in asymptomatic HIV positive patients, warranting thorough baseline evaluation. Infection of nonlymphoid organs with high levels of HIV does not occur until late-stage disease. At this time the CNS becomes a target for opportunistic infections, as well as effects attributed to the virus itself.

Strong command support for continuing duties in aviation given the deployability restrictions of AR 600-110 will be carefully weighed.

REFERENCE: <http://uptodateonline.com/>